PPL13 PROJECT NOMINEE FACT SHEET
March 18, 2003

Project Name and Number: Whiskey Island Back Marsh Creation

Coast 2050 Strategies: #12- Restore and Maintain the Isles Dernieres and Timbalier Barrier Island Chains.

Project Location: Region 3, Terrebonne Basin, Terrebonne Parish, south of Pelto Marshes, Isles Dernieres Barrier Island Chain, Whiskey Island.

Problem: The Isles Dernieres have been one of the most rapidly deteriorating barrier shorelines in the United States. This barrier island chain serves as a storm buffer for inland bays, estuaries and wetlands, provides important habitat for one of the world's most productive fisheries, and protects human populations as well as oil and gas infrastructure. Area change rates for Whiskey Island 1978-1988 were documented at a loss of 31.1 acres per year. The need for additional island marsh width for low dune areas to roll back on during storms for maintaining the barrier structural function has been demonstrated with recent storm events.

Goals
1) Dredge and import sediment into the Louisiana coastal ecosystem to widen marsh platform on the central and eastern portions of Whiskey Island ; restore portion of island to near Year 1890 width. Meet the original intent of Whiskey Island restoration of 1993 for a low and wide island demonstration which was necessarily revised due to elevation of costs during long period of resolution of land ownership.
2) Enhance the structural function of Whiskey Island as a protective barrier for back bay and inland areas.
3) Provide unique and sustainable barrier island habitat for numerous biological species, including endangered species, in areas that are presently open water; provide additional protection of such existing habitat previously created.

Proposed Solution: Construct back barrier marsh behind Whiskey Island area constructed by a previous CWPPRA project. Construction of these back barrier marshes will widen island sections promoting the long term sustainability of the island. Up to approximately 360 acres of back barrier marsh, built to an elevation of 0'- 2' NAVD 88 will be created in the mid portion of the island. An optional construction area of up to approximately 180 acres is proposed in the eastern part of the island, behind the section of Whiskey Island that directly faces Whiskey Pass. Restored areas would be planted with appropriate barrier island vegetation. Sand fences are proposed. The Barrier Shoreline Advisory Group and CWPPRA Agencies would be consulted regarding features and dimensions. The Barrier Shoreline Advisory Group and CWPPRA Agencies would be consulted regarding sand source. Cost estimates provided here are associated with offshore sand source based on our recent experience with New Cut.

Preliminary Project Benefits:

- The project could potentially create up to 540 acres of additional back barrier marsh habitat. "Intertidal marsh" could be created to extent recommended by the Barrier Shoreline Advisory Group .
- The project would protect additional existing marsh created in previous CWPPRA project.
- Addition of sediment into the littoral transport system of the Louisiana coastal system will promote self sustainability.

- Attenuation of wave heights would occur in back bays, resulting in reduction of inland marsh loss. Reduction of hurricane storm surges would occur.
- Cuts and breaches would be prevented which would help to reduce sediment loss for the barrier island system into deeper waters.

Compatibility with Coast 2050 Criteria by Joint Working Groups

Wetland Elevation/Sustainability

The restoration of barrier habitat from open water to emergent marsh constitutes vertical accretion. Further vertical accumulation of wetland soil will be accomplished by use of vegetative plantings that will help hold/trap sediment and produce above ground biomass. The constructed width will contribute to the stability of overwash sediments ensuring that more will be held on the marsh platform rather than lost into open water, further contributing to sustainability of the island.

Please note that the Terrebonne Parish's pilot project of 1985-86 on the East Island has demonstrated substantial self sustainability for the past 17 years.

This project is proposed to sustain 250 to 500 acres emergent wetlands acres over the project life .

Ecosystem Influence Area

The project will directly create island emergent habitat and project will benefit the islands, bays, fringe and inland marshes north of the creation area by cutting wave energy and resulting in reduction of land loss. The project will beneficially influence a low-medium area due to the reduction of wave energy in an arc to the north, northwest and northeast. The proposed ecosystem influence area is 3000 to 5000 acres.

Structural Framework

The Isles Dernieres provide the gulfward boundary of the Terrebonne Estuary and barrier to the Gulf of Mexico. The strengthening of Whiskey Island will contribute to a more sustainable barrier system over the life of the project. The project is proposed to provide benefits for more than 20 years to less than 25% of the ecosystem influence area.

Infrastructure

The project should have a net positive impact on non-critical coastal infrastructure. For example, an active oil/gas well facility exists at the eastern project area.

Organism and Material Linkages

The project is expected to have the natural level of exchange of organisms and materials consistent with the sustainability of the ecosystem.

Coast 2050 Habitat Objectives

The habitat objectives for this area of Region 3 are for barrier island/cheniere shorelines. This project is proposed to maintain/achieve habitat objectives on ranks high for maintaining/achieving this type of habitat.

Project Synergy

The project provides a high degree of synergy with other approved restoration projects and is part of phased restoration effort.

Comments:
Sand Source identification has not been made. The Barrier Island Advisory Group will be consulted.

Preliminary Construction Costs:
The range of costs proposed is $15M to $20M, fully funded for possible offshore source. A local sand source for this back barrier restoration would be less.

The Terrebonne Parish requested that the project be limited to a maximum fully funded cost of $20M.

Preparer of Fact Sheet
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